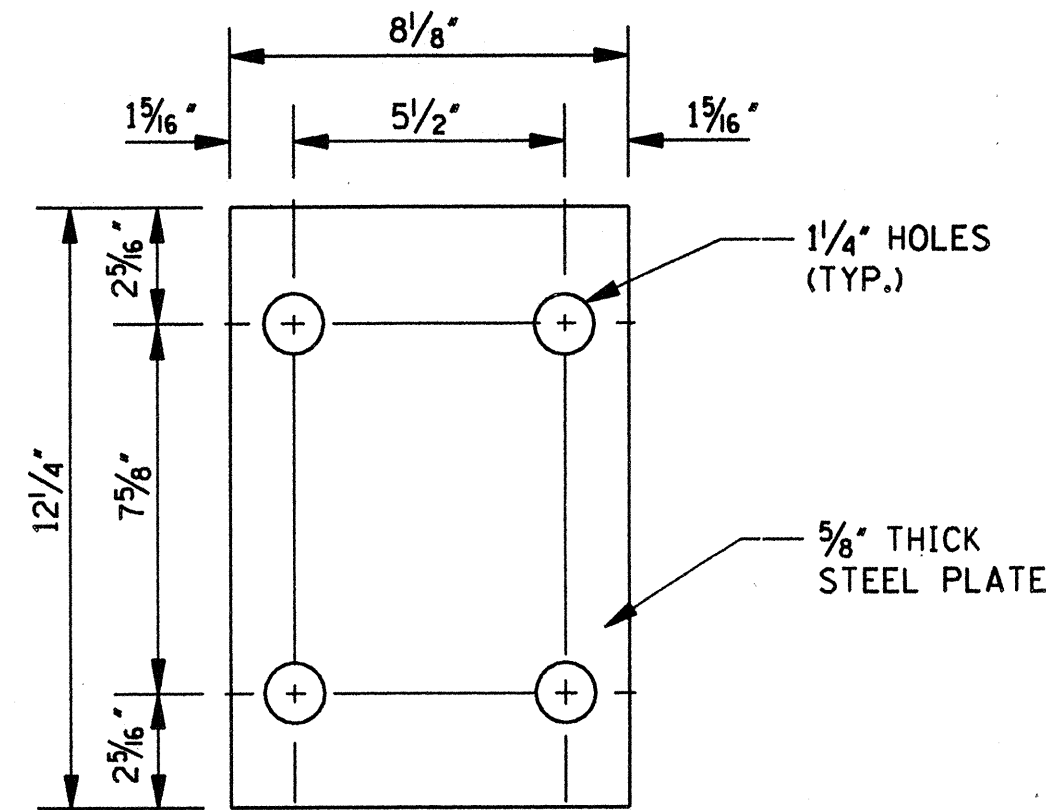
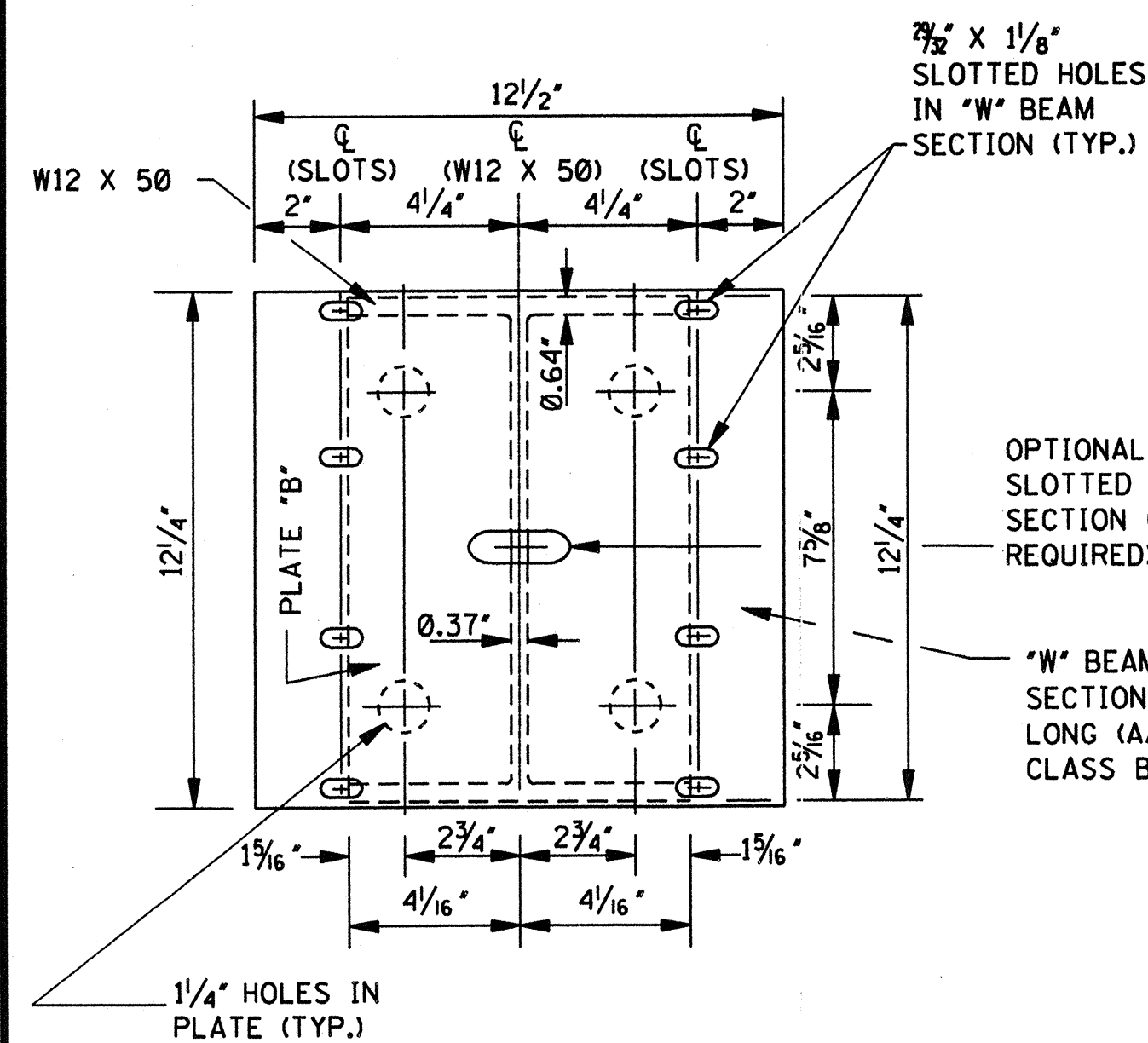


TYPE "1" "W" BEAM END SECTION

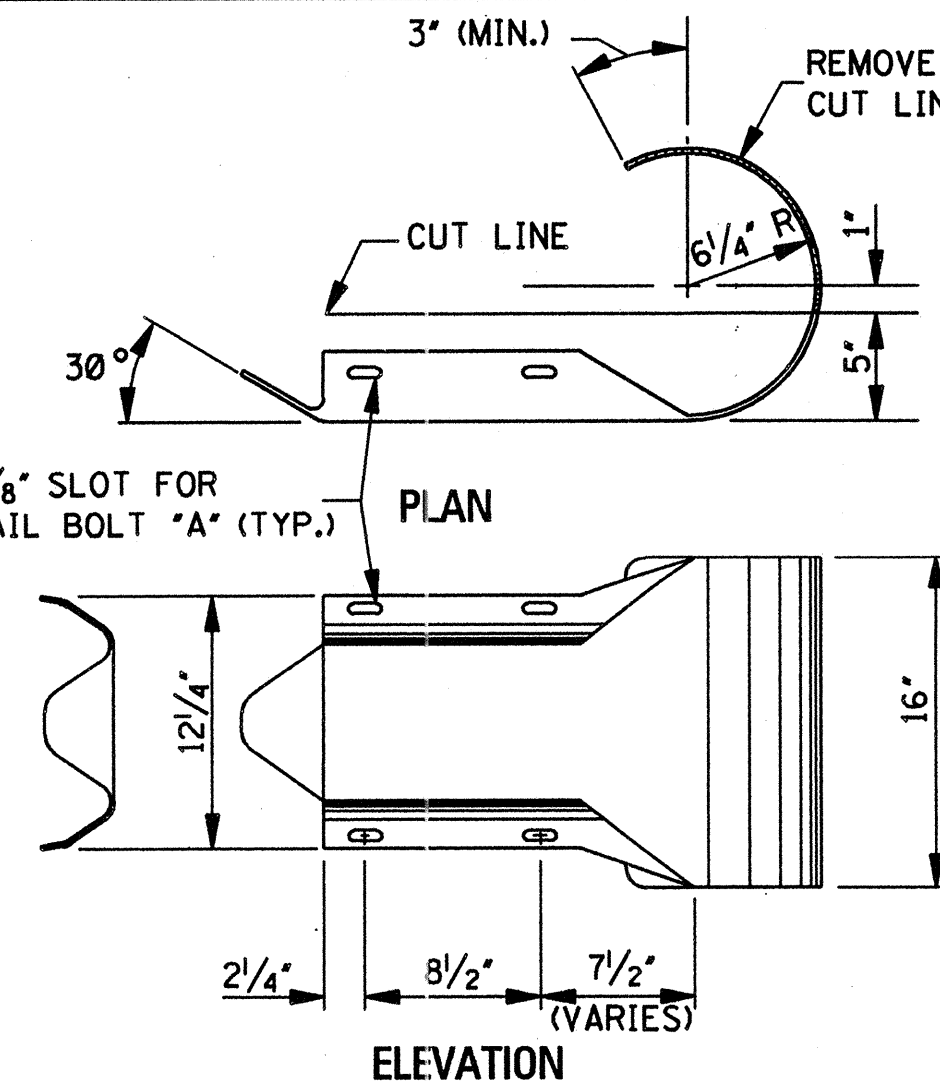
NOTE: THE TYPE "1" END SECTION IS THE STANDARD FLARED "W" BEAM END SECTION AND IS USED WITH THE TYPE "A" AND TYPE "E" BRIDGE END SECTIONS. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM GUARDRAIL.



DETAIL OF PLATE "B"

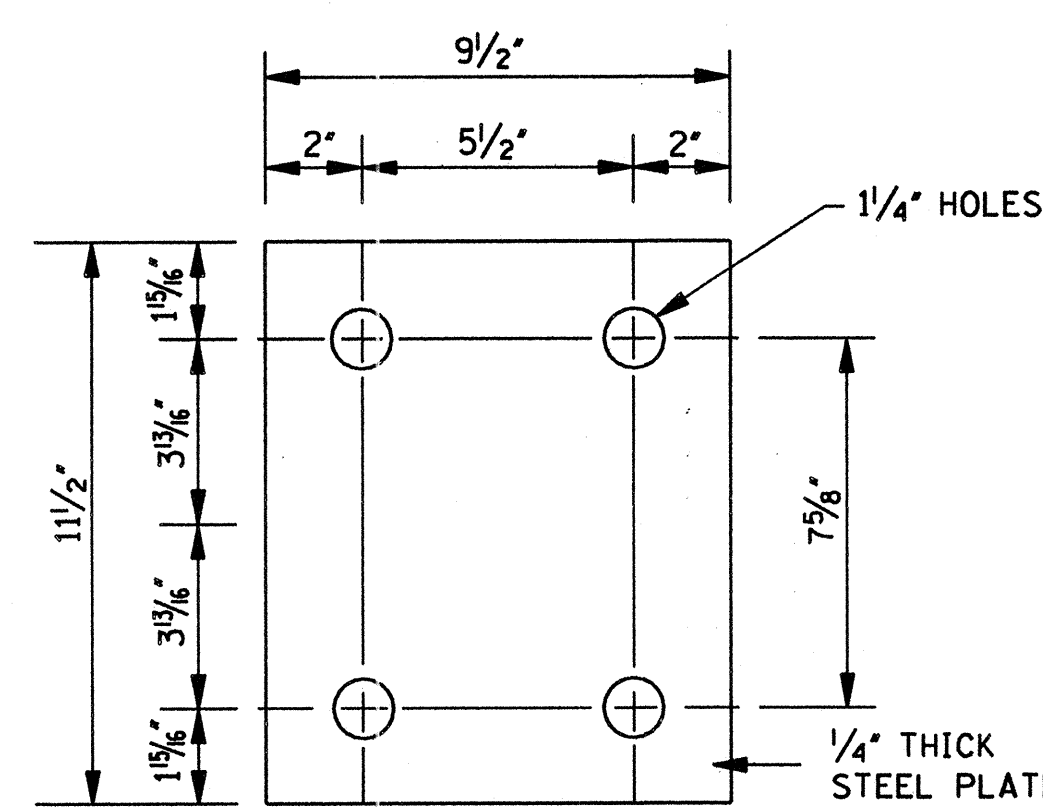


FACE ELEVATION

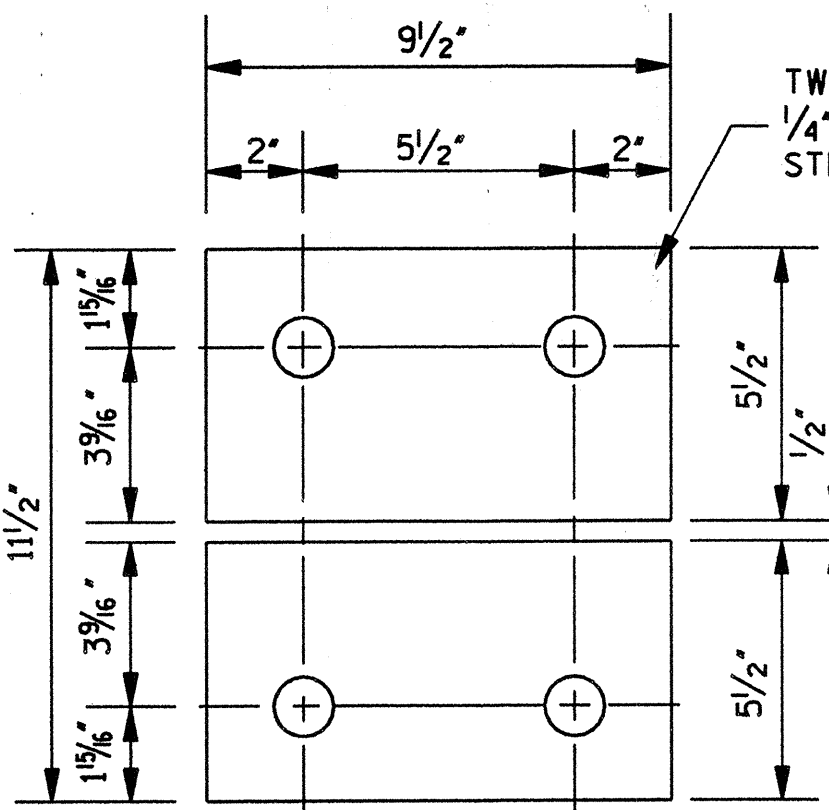


TYPE "2" "W" BEAM END SECTION

NOTE: THE TYPE "2" END SECTION IS A MODIFICATION OF THE STANDARD ROUNDED "W" BEAM END SECTION AND IS USED EXCLUSIVELY WITH THE TYPE "C" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM GUARDRAIL.

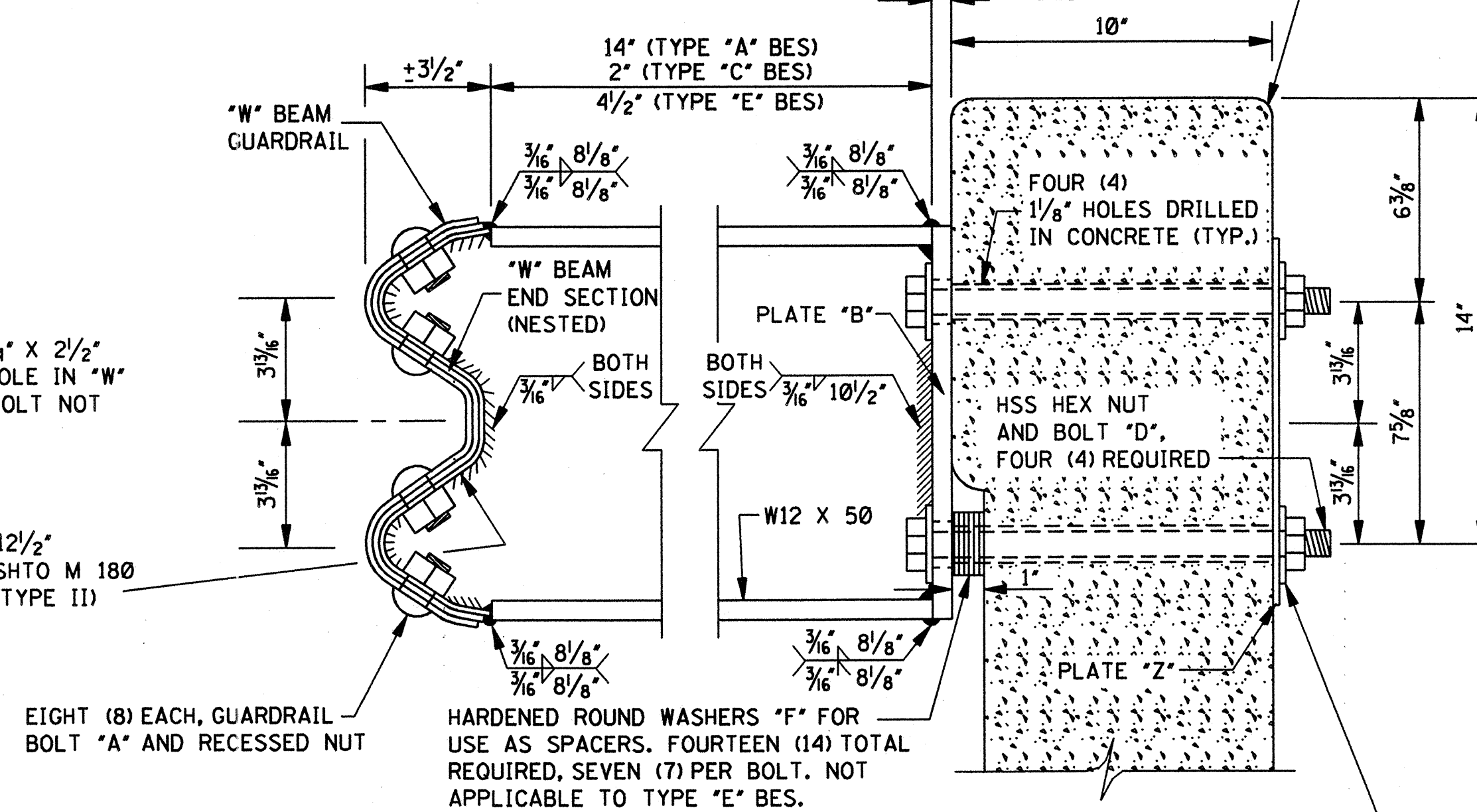


STANDARD



ALTERNATIVE

DETAIL OF PLATE "Z"



GUARDRAIL CONNECTION DETAILS

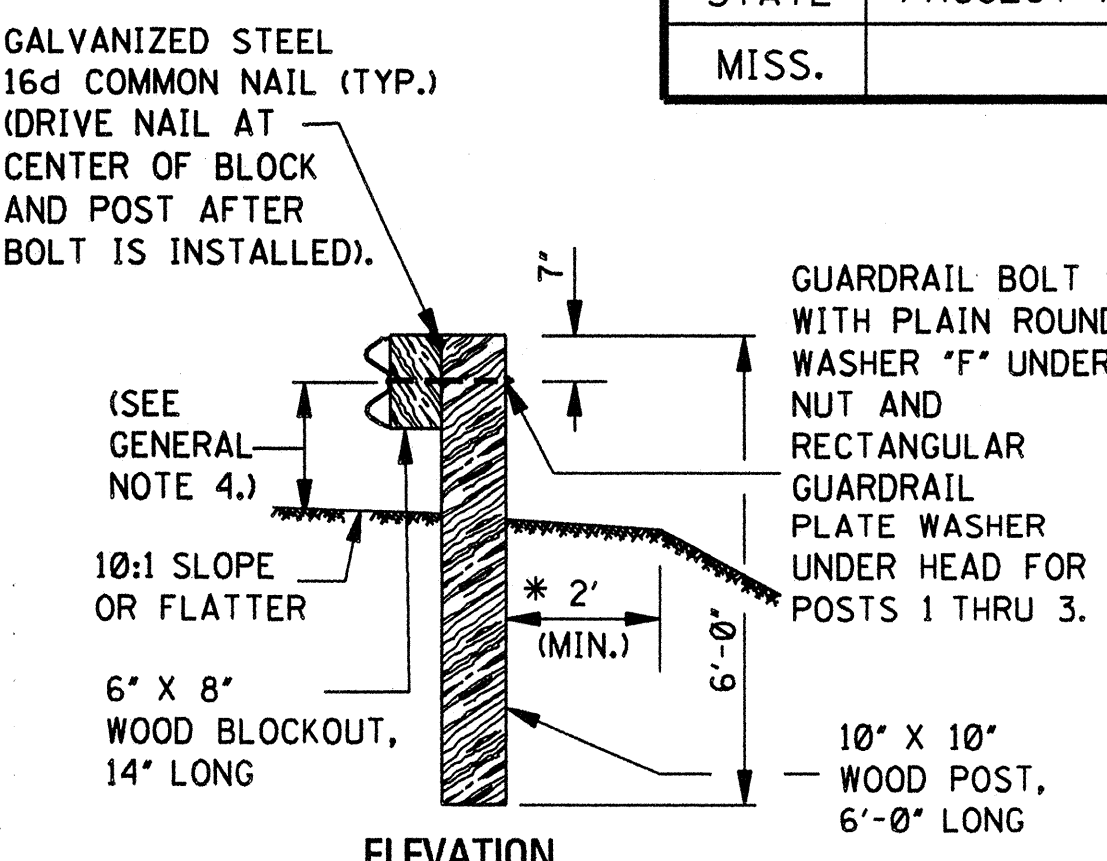
NOTE: UNLESS OTHERWISE SPECIFIED, THE BLOCKOUT ASSEMBLY, FASTENER AND PLATE DETAILS SHOWN ABOVE ARE ALSO APPLICABLE TO THE TYPE "E" BRIDGE END SECTION. SEE GENERAL NOTE 3.

GUARDRAIL BOLT "E" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 1 THRU 3.

10" X 10" WOOD POST, 6'-0" LONG, WITH 6" X 8" WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 3.

6" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 8" WOOD BLOCKOUT, 14" LONG, FOR POSTS 4 THRU 6.

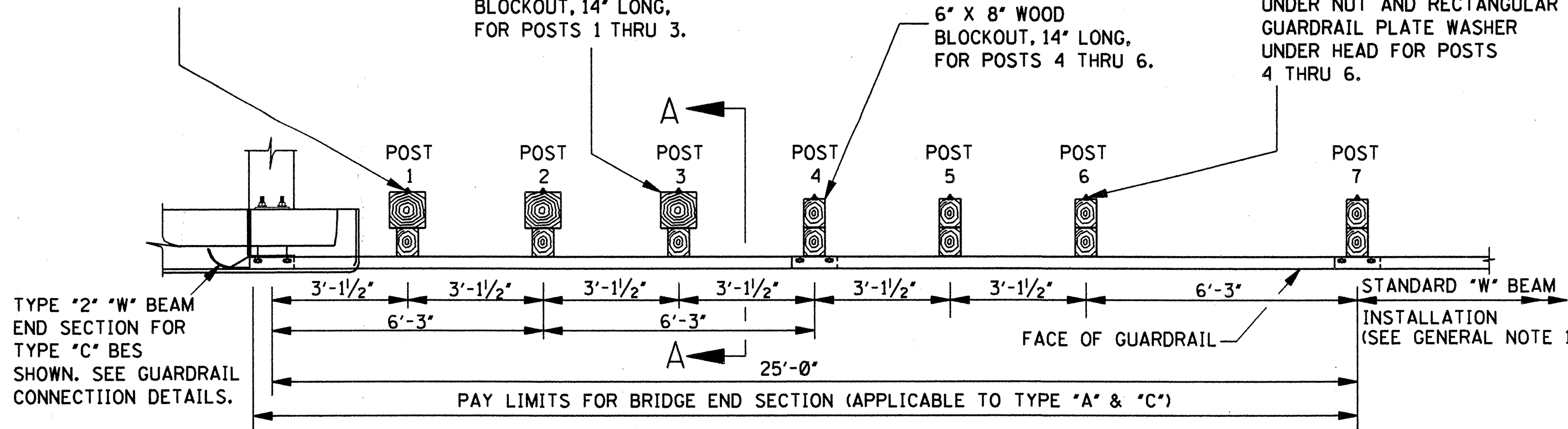
GUARDRAIL BOLT "D" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 4 THRU 6.



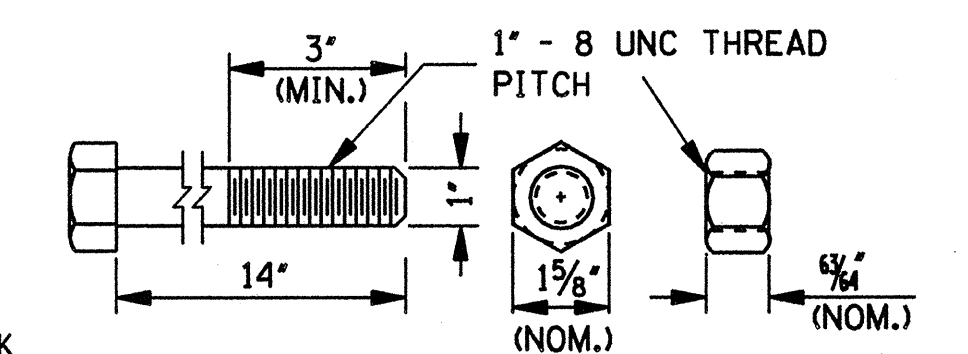
ELEVATION

SECTION A-A

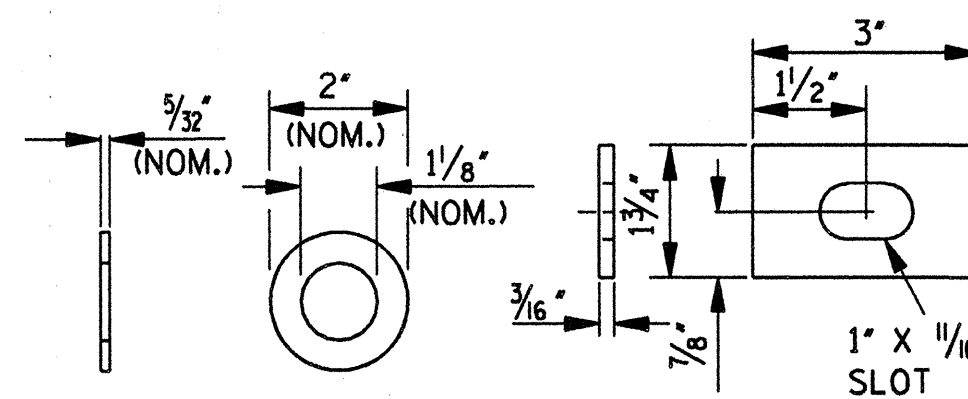
\*NOTE: UNLESS OTHERWISE SPECIFIED ON THE PLANS.



PLAN OF BRIDGE END SECTION



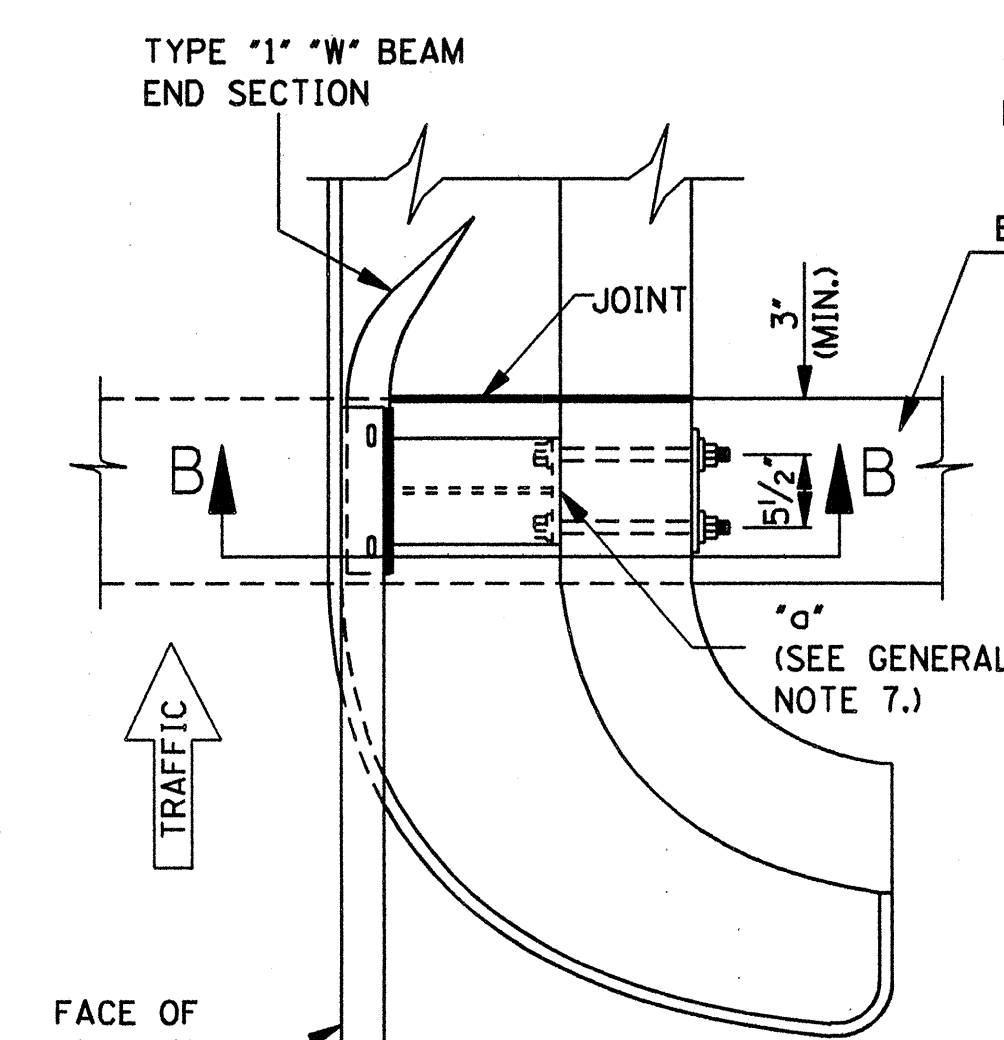
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "D" (ASTM A 325)



HARDENED ROUND WASHER "F" RECTANGULAR GUARDRAIL PLATE WASHER

FASTENER DETAILS

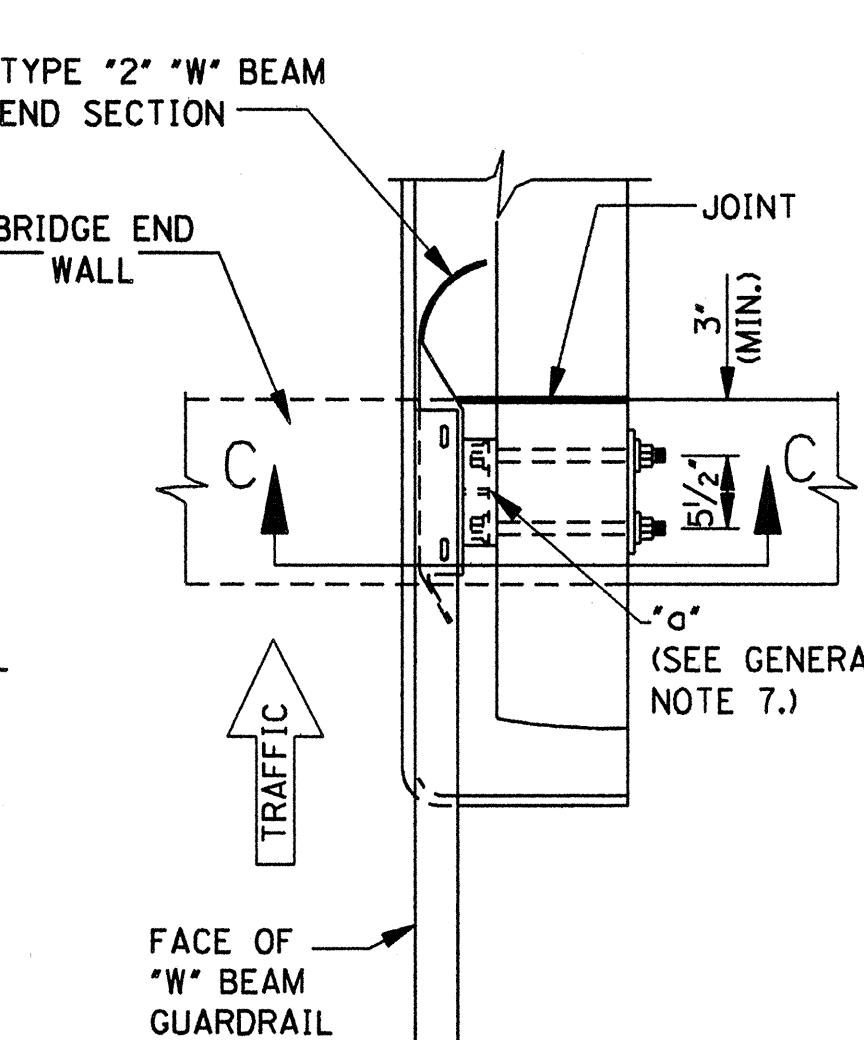
- GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
  2. WOOD POSTS ARE SHOWN ON THIS SHEET. WHEN STEEL POSTS ARE INSTALLED, A SOIL BEARING PLATE IS PLACED ON THE STANDARD SIZE STEEL POST FOR POSTS 1 THRU 3 AND A RECTANGULAR GUARDRAIL PLATE WASHER IS PLACED UNDER THE STANDARD POST BOLT HEAD FOR POSTS 1 THRU 6. SEE DETAILS FOR STEEL POST INSTALLATIONS ON SHEET GR-1B.
  3. FOR INFORMATION PERTAINING TO THE INSTALLATION OF THE TYPE "E" BRIDGE END SECTION, SEE SHEET GR-2A.
  4. THE HEIGHT OF RAIL AT THE BRIDGE END IS 20 7/8" AND WILL BE TRANSITIONED TO 22" AT POST 7. THIS TRANSITION WILL BE A LINEAR TRANSITION IN THE VERTICAL PLANE.
  5. ALL GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.
  6. THE APPLICATION OF THIS STANDARD IS FOR ONE-WAY TRAFFIC DIRECTION ONLY.
  7. POINT "σ", WHICH IS AT THE CENTERLINE BETWEEN THE ANCHOR BOLTS, WILL BE CENTERED OVER THE CENTERLINE OF THE BRIDGE END WALL EXCEPT IN SKEWED BRIDGE ENDS WHERE THE BOLT NEAREST THE JOINT WILL BE A MINIMUM OF 3" FROM THE JOINT.



PLAN

SECTION B-B

TYPE "A" BRIDGE END SECTION



PLAN

SECTION C-C

TYPE "C" BRIDGE END SECTION

GUARDRAIL CONNECTION AT BRIDGE END

|   |  |  |  |
|---|--|--|--|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION      |  |  |  |
| ROADWAY DESIGN DIVISION                       |  |  |  |
| STANDARD PLAN                                 |  |  |  |
| GUARDRAIL: BRIDGE END SECTIONS TYPE "A" & "C" |  |  |  |
| WORKING NUMBER GR-2                           |  |  |  |
| SHEET NUMBER 184                              |  |  |  |
| ISSUE DATE: OCTOBER 1, 1998                   |  |  |  |